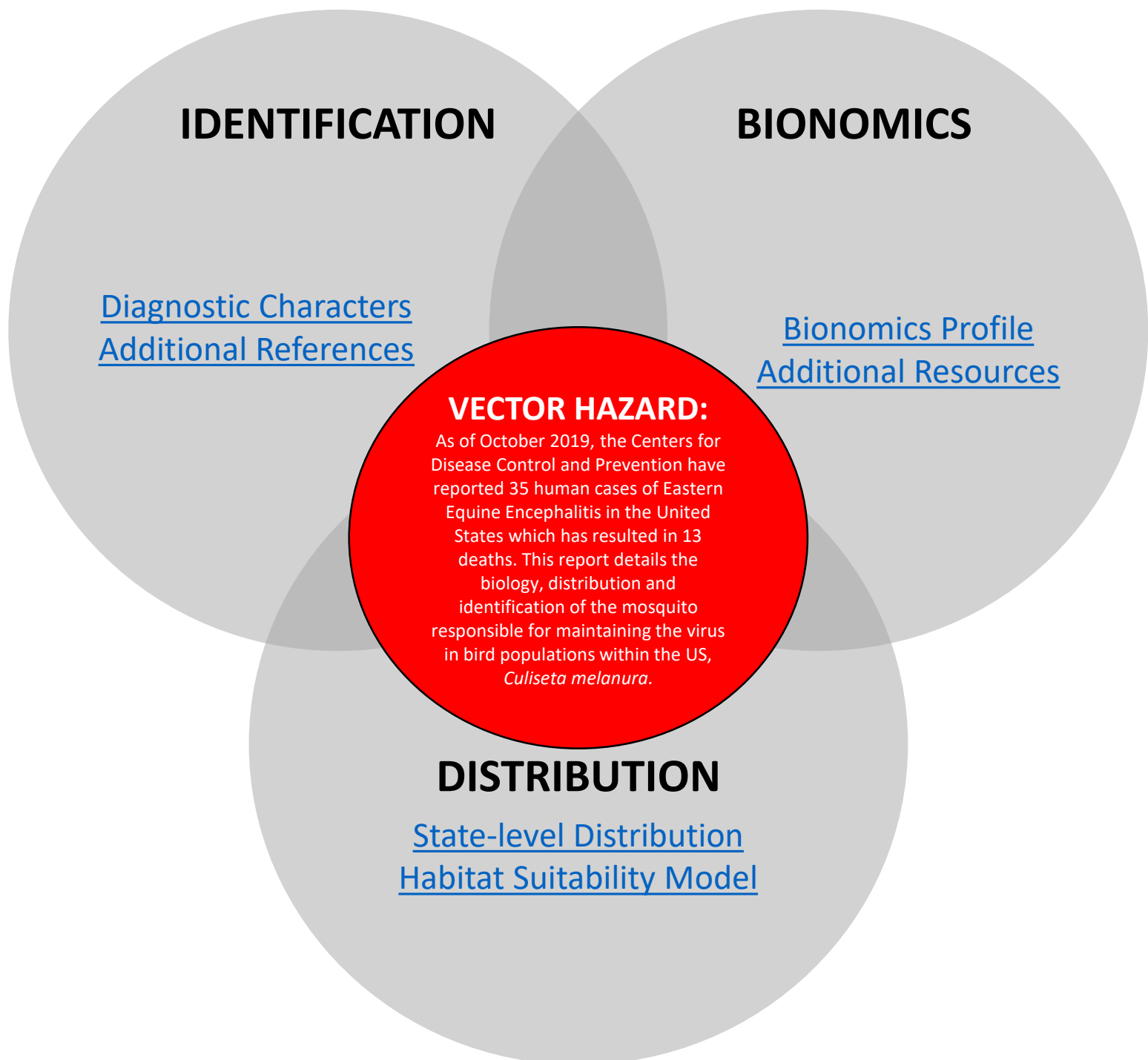
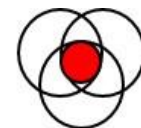


Vector Hazard Report

Culiseta (Climacura) melanura (Coquillett, 1902)

Vector of Eastern Equine Encephalitis Virus





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IDENTIFICATION

Specimen Images



Habitus: *Cs. melanura* Female



Thorax Dorsal View: *Cs. melanura* Female



Head Dorsal View: *Cs. melanura* Female



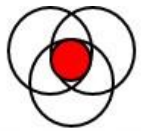
Abdomen Lateral View: *Cs. melanura* Female



Head Lateral View: *Cs. melanura* Female



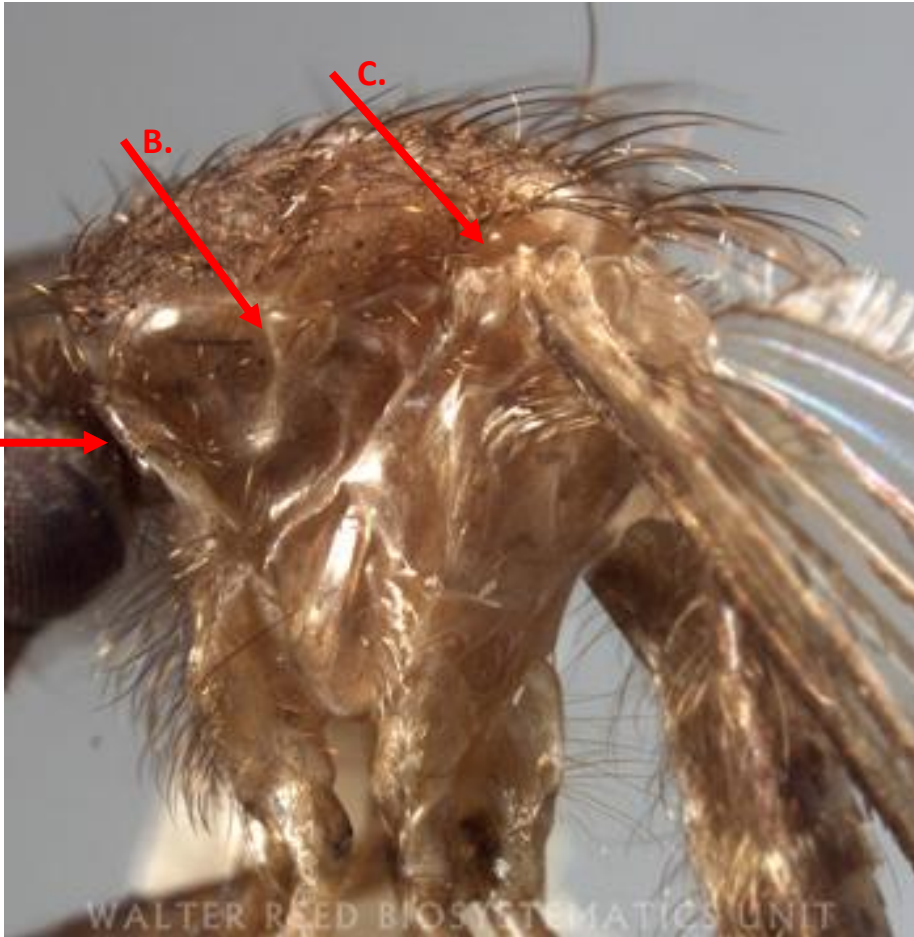
Abdomen Dorsal View: *Cs. melanura* Female



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IDENTIFICATION

Diagnostic Characters: Adult Female



Thorax Lateral View: *Cs. melanura* Female

Characters:

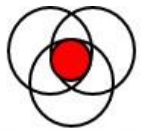
- A. Anterior pronotal without scales or setae
- B. 1-5 prespiracular setae
- C. Spiracular setae dark



Hindleg: *Cs. melanura* Female
Character: Hindtarsi III dark



Wing Lateral View: *Cs. melanura* Female
Character: Wing costa entirely dark-scaled



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IDENTIFICATION

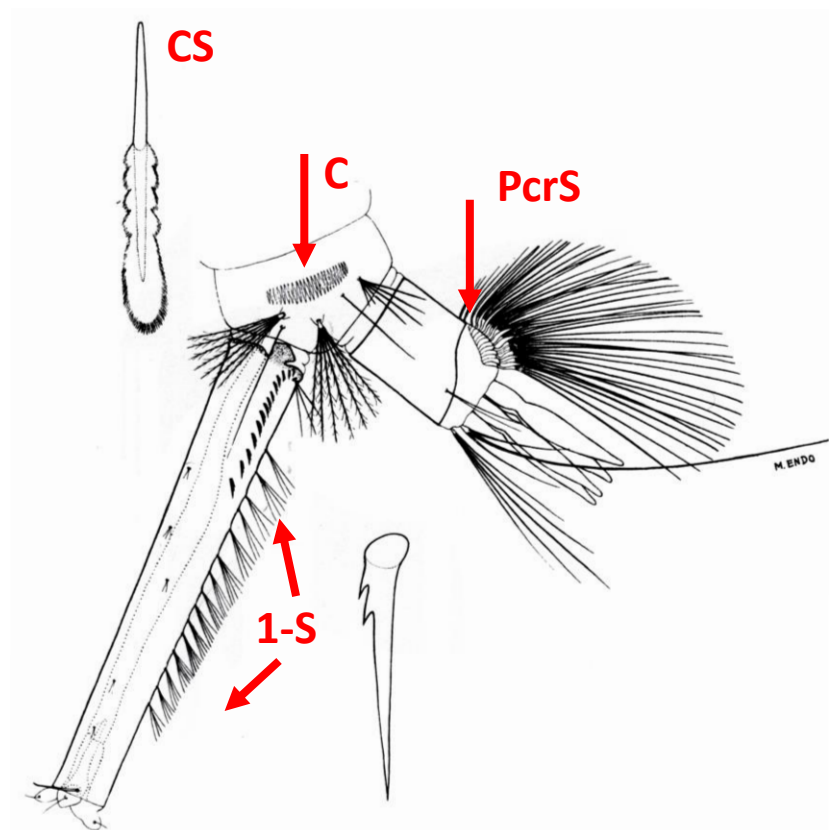
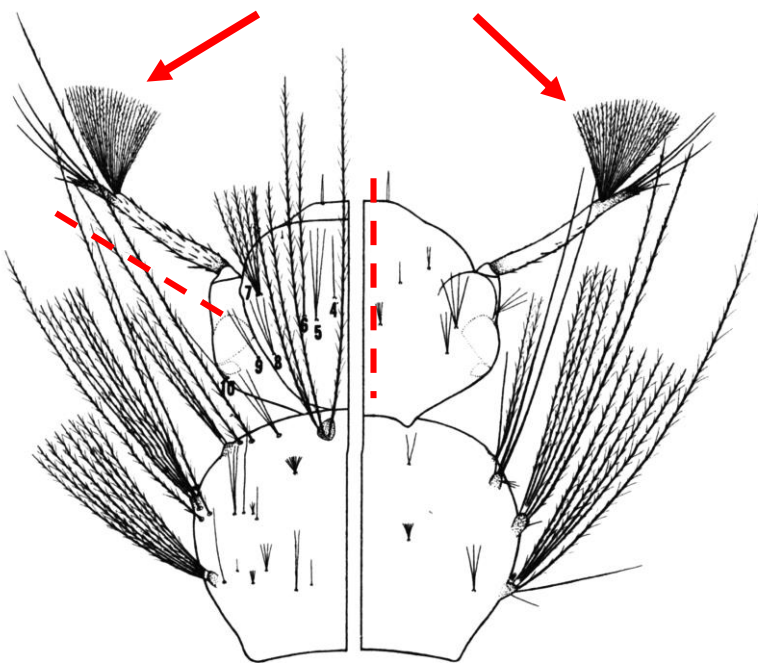
Diagnostic Characters: Adult Female



Thorax Lateral View: *Cs. melanura* Female

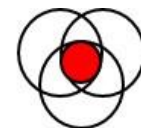
Character: Abdominal sternal scales cream colored or yellowish sometimes with dark scales intermixed

Diagnostic Characters: Larvae



Larval Head Dorsal View: Antennae at least as long as head; seta 1-A, multiple, aciculate, inserted in notch at outer 0.25 of shaft and extending much beyond tip.

Larval Abdomen Lateral View: Comb (C) with about 25 large comb scales (CS) arranged in distinct bar-like row; seta 1-S with 8–16 tufts in midventral line, starting within pecten (Pt) and ending near apex of siphon (S); siphon with small dorsolateral setae; siphon index 6–7; a few precratal setae (PcrS) present. (Figure: Carpenter, S. J., & LaCasse, W. J. (1955). Mosquitoes of North America. Berkeley. CA UC Press, 360, (p. 96).

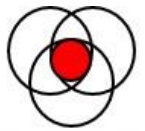


Cs. melanura is primarily zoophilic and feeds mostly on birds, which is why it plays a significant maintenance role in the bird cycle of EEEV. Although it is known to occasionally feed on reptiles and mammals, it is rarely anthrophilic, unless humans are close to the larval habitats. Larvae are active in the warmer months of spring, summer and fall. *Cs. melanura* immatures are found in ground water habitats, including swamps, flood plains, ground pools and other small, permanent water bodies. Females oviposit in cool, acidic waters (c. pH5.0). Adults are often collected in light traps and resting boxes placed in forested areas, but have never been reported inside human dwellings.

Differences in reported survival strategies for the species in different regions in Northern America are strongly indicative of the presence of cryptic species within this taxon. The species is polycyclic in all zones, but *Cs. melanura* populations in the North persist through essential female diapause, not reported in Southern populations. In New Jersey, diapause has been noted both as females and as larvae; whereas *Cs. melanura* populations in Rhode Island survive in the winter as larvae, and female diapause is not reported.

Additional Resources

- [Health Map.org for news about ongoing vector-borne disease outbreaks](#)
- [WRBU Species Page](#)
- [CDC EEEV Page](#)

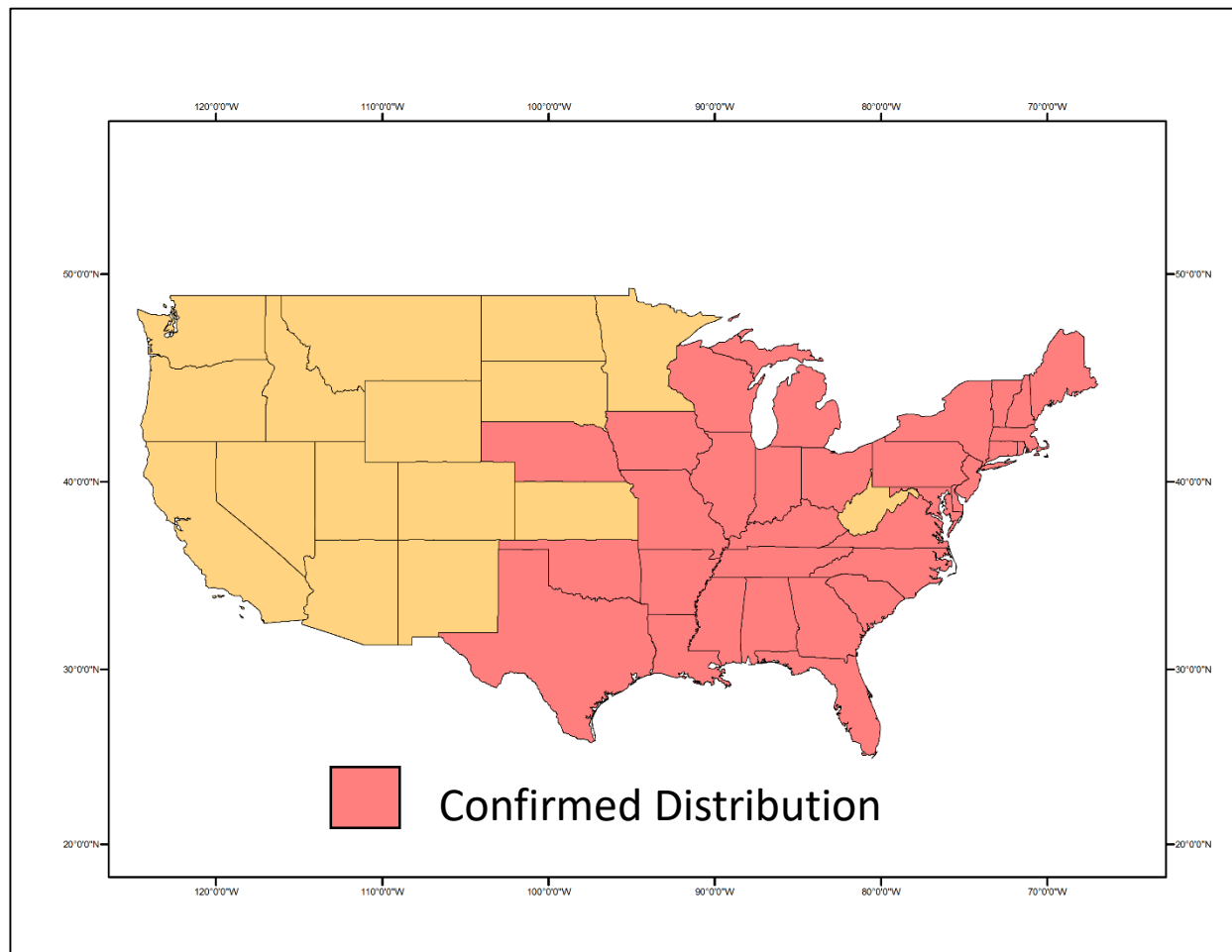


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DISTRIBUTION

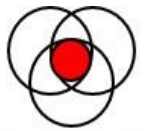
State-level Distribution for *Culiseta (Climacura) melanura* (Coquillett, 1902)

Distribution records compiled by WRBU and listed in [distribution references section](#).



Confirmed Distribution:

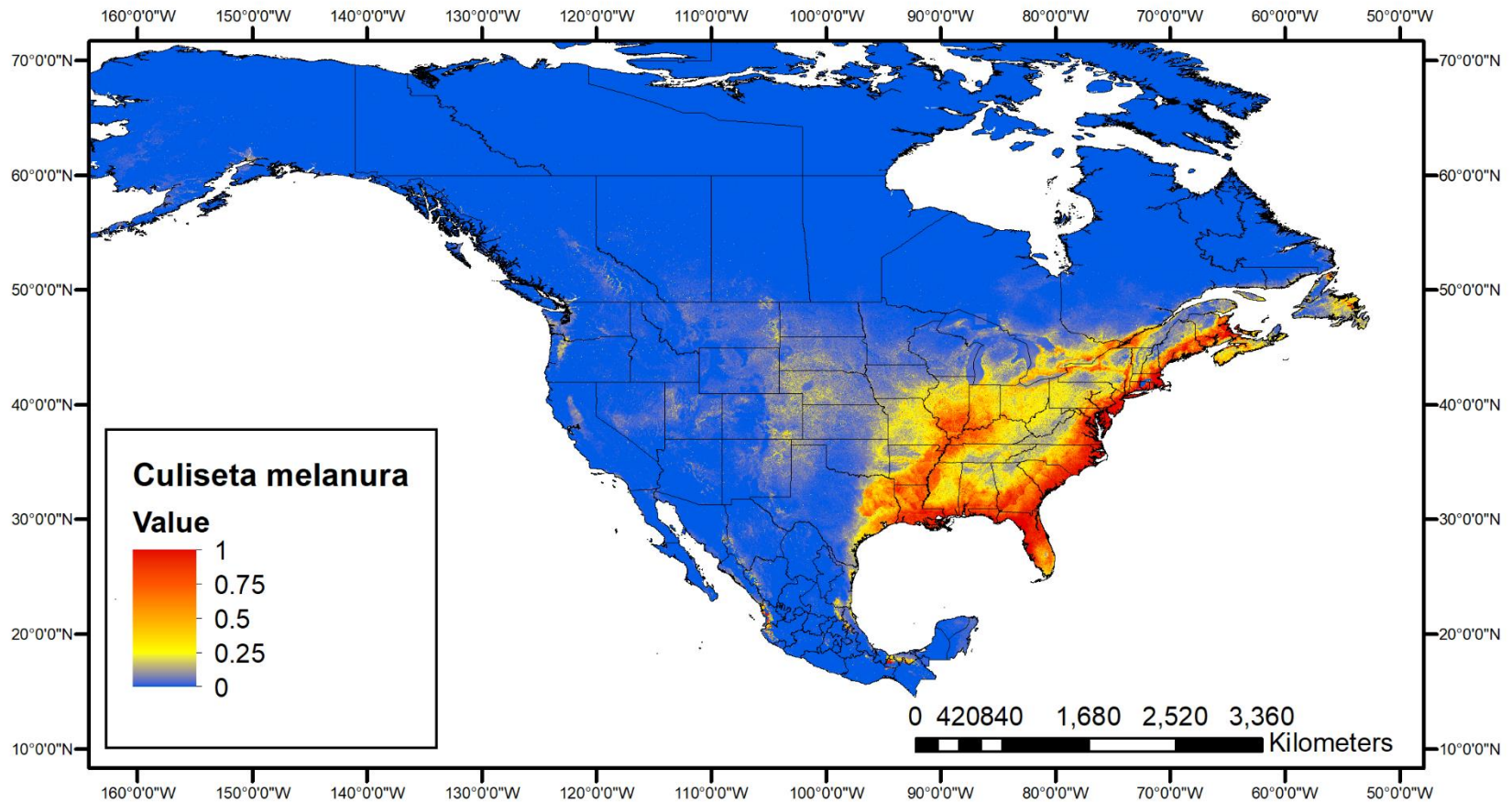
| | |
|----------------------|----------------|
| Alabama | Mississippi |
| Arkansas | Missouri |
| Connecticut | Nebraska |
| Delaware | New Hampshire |
| District of Columbia | New Jersey |
| Florida | New York |
| Georgia | North Carolina |
| Illinois | Ohio |
| Indiana | Oklahoma |
| Iowa | Pennsylvania |
| Kentucky | Rhode Island |
| Louisiana | South Carolina |
| Maine | Tennessee |
| Maryland | Texas |
| Massachusetts | Vermont |
| Michigan | Virginia |
| | Wisconsin |



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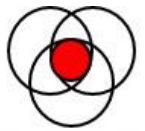
DISTRIBUTION

Habitat Suitability Model for *Culiseta (Climacura) melanura* (Coquillett, 1902)



Habitat suitability model developed using maximum entropy (MaxEnt). Presence data sources: VectorMap, the USNM National Mosquito Collection and VectorBase (PopBio). Model developed by Alexander Potter (Oak Ridge Institute for Science and Education Fellow, WRBU)





ADDITIONAL RESOURCES

IDENTIFICATION REFERENCES

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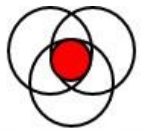
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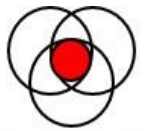
ADDITIONAL RESOURCES



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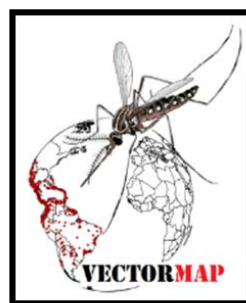
WE NEED YOUR DATA AND SPECIMENS!

Are you collecting mosquitoes in the United States? Consider contributing your collection data to WRBU's web repository, VectorMap. Your data will help characterize the true distribution of *Culiseta melanura* and may be used to model habitat suitability in the US. To learn about how to format your data for VectorMap and submit it for consideration [click here](#).

You can also request a voucher specimen submission kit via WRBU. This kit will contain supplies for the preservation and shipment of voucher specimens associated with your study. For more information [contact WRBU](#) at NMNH-WRBU@si.edu.



The Walter Reed Biosystematics Unit is part of the Walter Reed Army Institute of Research and is based at the Smithsonian Institution Museum Support Center. To access taxonomic keys, the Systematic Catalog of Culicidae or to learn more about WRBU visit wrbu.si.edu



VectorMap is only as good as the data you provide. If you have collection records, models or pathogen testing results please contact the VectorMap team to learn how to contribute data at mosquitomap@si.edu



Vector Photos Provided by Judith Stoffer,
Walter Reed Biosystematics Unit

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